

**2001 California Fire Code Amendments
and Local Amendments**

November 01, 2002

Date: October 28, 2002

To: Planning and Development Personnel

From: Vahid Toossi, P.E.

Regarding: 2001 California Fire Code Amendments

The attached document contains the Orange County Fire Authority's (OCFA) amendments to the 2001 Edition of the California Fire Code (CFC). The document is prepared for the Planning and Development personnel. The document also contains all the local amendments.

Fire Code Adopted

Except as hereinafter provided, the California Fire Code, 2001 (Part 9, Title 24, California Code of Regulations), which incorporates and amends the Uniform Fire Code, 2000 Edition, published by the International Conference of Building Officials including Appendices I-B through VI-K, excluding Appendix II-F, II-H, II-K, VI-E, and VI-F subject to the changes and modifications set forth in the Fire Code Amendment package. The 2000 Uniform Fire Code Standards including Appendix A-II-F, is hereby adopted by reference as the Fire Code of the City for the purpose of prescribing regulations governing conditions hazardous to the life and property from fire or explosion, save and except as hereinafter amended. One copy of the Fire Code is now on file in the office of the City Clerk for public inspection and are adopted with the same force and effect as though set out herein in full.

Enforcement and Inspections

The California Fire Code and the Uniform Fire Code with amendments shall be enforced by the Orange County Fire Authority, which shall be operated under the Director of Fire Services of the Orange County Fire Authority. The Director of Fire Services of the Fire Authority may detail such members of the fire authority as inspectors as shall be necessary from time to time.

ARTICLE 1

ADMINISTRATION is hereby amended as follows:

SECTION 101.2.2--Application and Enforcing Agency is hereby amended by deleting Section 101.2.2 and replacing with the following:

Section 101.2.2 Application and Enforcing Agency. The chief is authorized and directed to enforce, within the scope of Section 101.2.1, the provisions of this code over all occupancies and land used within the City.

SECTION 101.6 Conflicting Provisions is hereby deleted and replaced with the following:

Section 101.6 Conflicting Provisions. Where there is a conflict between a general requirement and a specific requirement, the Chief shall decide which requirement meets the general intent of this code.

SECTION 103.2.1.1 General is hereby amended by adding a final paragraph as follows:

Section 103.2.1.1 General. The building official and fire official shall work in cooperation to enforce the amendments to the following sections:

Section 103.1.2	Alternate materials and methods
Section 901.4.4	Premises Identification
Section 1003	Fire-extinguishing Systems
Section 1004	Standpipes
Section 1006.2.9.1.3	Smoke Detectors
Section 1006.2.12.2.1	High-rise Buildings
Section 1109.7	Sparks from Chimneys
Section 2501.16	Maximum Occupant Load

SECTION 103.3.1.1—Authority to inspect is hereby deleted and replaced as follows:

Section 103.3.1.1 Authority to Inspect. The Fire Prevention Bureau shall inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the chief for the purposes of ascertaining and causing to be corrected any conditions which would reasonably tend to cause fire or contribute to its spread, results in an unauthorized discharge of hazardous materials, or any violation of this code or any other law or standard affecting fire and life safety.

SECTION 103.3.2—New construction and alterations is hereby amended by adding new Sections 103.3.2.4—Reconstruction and 103.3.2.5—Fire Protection information on Plans, as follows:

Section 103.3.2.4 Reconstruction. Any building undergoing construction within any 2-year period, in which the floor area of reconstruction is 75 percent or more prior to

the submittal of a building permit application, shall comply with the code provision for new construction.

Section 103.3.2.5 Fire Protection Information on plans. A vicinity plan, scale no smaller than 1 inch (25 mm) equals 60 feet (18 288 mm), shall be submitted for new construction. The plan shall show the following:

1. All existing and proposed private and public streets on the proposed development property and within 300 feet (91 440 mm) of the property line of the proposed development, and so identified, with street width dimensions as per Section 902.2.2 of this code.
2. The location and identification of all existing and proposed fire hydrants within 300 feet (91 440 mm) of the property line of the proposed development.
3. The location, occupancy classification, and use of structures and buildings on properties abutting the proposed development.

EXCEPTION: The chief, with the concurrence of the building official, may waive the vicinity plan submittal requirements of this section.

SECTION 103.4.4--Citations is hereby amended by adding new Sections 103.4.4.1—Infraction, 103.4.4.2—Misdemeanor, and 103.4.4.3—Separate Offense, as follows:

Section 103.4.4.1 Infraction. Except as provided in Section 103.4.4.2, persons operating or maintaining any occupancy, premises or vehicle subject to this code who shall permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction.

Section 103.4.4.2 Misdemeanor. Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the chief or a duly authorized representative, or who violate the following sections of this code, shall be guilty of a misdemeanor:

Section 103.4.3	Compliance with Orders, Notices and Tags
Section 104.1.2	Interference
Section 1001.6	Tampering with Fire-protection Equipment, Site Barriers, Security Devices, Signs and Seals
Section 1109.5	Burning Objects
Section 1302.3	False Alarms
Section 2501.16	Maximum Occupant Load
Section 3209	Maximum Occupant Load
Section 3215	Sources of Ignition
Section 7701.7	Prohibited and Limited Acts

Section 103.4.4.3 Separate Offense. Each violation will be deemed a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this chapter or of the code adopted hereby is committed, continued or

permitted by such person, firm, partnership or corporation and shall be deemed punishable therefor as provided in this code.

SECTION 105.8 --Permit Required is hereby amended by adding and deleting permit categories as follows:

- f.1. Subsection n f.1. Fire hydrants and water-control valves is deleted without substitution.
- f.5. Subsection f.5. Fumigation or thermal insecticidal fogging is hereby deleted without substitution.
- g.1. A new Subsection g.1. General use permit is added as follows:
 - g.1. General use permit. To conduct an activity or operation that is not specifically addressed by other permits, but which is likely to produce conditions hazardous to life or property.
- o.1. Subsection o.1 Open burning is amended by adding the following sentence:
Open burning permits shall include:
 - 1. Bonfires/rubbish fires, including construction sites.
 - 2. Recreational fires/burning in a public place.
- o.4. New Subsection o.4 Open flame device in marinas is added as follows:
 - o.4 Open flame devices in marinas. To use any open flame device for repair or maintenance in marinas, or for lighting or decoration on the exterior of any boat, slip, or wharf.
- o.5. New Subsection o.5 Oil and natural gas wells is added as follows:
 - o.5. Oil and natural gas wells. To drill, own, operate, or maintain an oil or natural gas well.
- r.4. New Subsection r.4 Rifle range is added as follows:
 - r.4. Rifle range. To establish, maintain, or operate a rifle range.

ARTICLE 2

DEFINITIONS AND ABBREVIATIONS is hereby amended by adding the following definitions:

Section 207—F

FLOOR AREA (FS) – for the purpose of calculating square footage for application of fire sprinkler requirements, the floor area shall include all combustible areas attached to the structure, including garages, patio covers, overhangs, covered walkways, etc.

FLOWLINE is the lowest continuous elevation on a rolled street curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.

Section 219—R

RIFLE RANGE is any indoor or outdoor firing, shooting or target range established, maintained or operated for the discharge of a rifle, pistol, revolver, shotgun or firearm.

Section 223—V

VEHICLE FUELING APPLIANCE is a listed natural gas compressor package not containing storage, designed for the unattended dispensing of natural gas into the fuel tanks of motor vehicle.

ARTICLE 9

FIRE DEPARTMENT ACCESS AND WATER SUPPLY is hereby amended as follows:

SECTION 901.4.1--General is hereby amended by the addition of the following sentence at the end of the paragraph.

Section 901.4.1 General: All street signs shall be designed and maintained to be either internally or externally illuminated in a manner meeting the approval of the Fire Chief.

SECTION 901.4.2— is hereby amended as follows:

[IRVINE]

SECTION 901.4.2 is hereby deleted and the following substituted:

Section 901.4.2 Fire Apparatus Access Roads. All fire department access roads less than 36 feet (10,972 mm) in width shall be posted as a fire lane in accordance with the City standards and Orange County Fire Authority Guidelines.

Parking on one side is permitted on 28-foot (8,534 mm) wide streets. Parking on two sides is permitted on 36-foot (10,972 mm) wide streets. No parking is permitted on streets narrower than 28 feet (8,534 mm) in width.

Street widths are to be measured from top face of the curb to top of the curb, on streets with curb and gutter, and from flowline, on streets with rolled curbs.

SECTION 901.4.4--Premises Identification is hereby deleted and replaced as follows:

Section 901.4.4 Premises Identification. Approved numbers or addresses shall be placed on all new and existing buildings in such a position that is plainly visible and legible from the street or road fronting the property. Said numbers contrast with their background. Said numbers for new buildings shall be either internally or externally illuminated to be visible at night. All multi-unit residential and commercial buildings shall have numbers or addresses placed above or immediately adjacent to all doors that would allow fire department access in an emergency situation. In no case shall the numbers be less than 4 inches (102 mm) in height for residential and 6 inches (152 mm) in height for commercial with a 1 inch (25 mm) stroke or as required by local ordinance, whichever is more restrictive.

Multiple residential and commercial units having entrance doors not visible from the street or road shall, in addition, have approved numbers grouped for all units within each structure and positioned to be plainly visible from the street or road. Said numbers may be grouped on the wall of the structure or on a substantial mounting post independent of the structure.

SECTION 902.2.1--Required Access is hereby amended as follows:

SECTION 902.2.2.1--Fire Apparatus Access Roads is hereby amended by adding the following sentence at the end of the first paragraph:

Section 902.2.2.1 Fire Apparatus Access Roads. Street widths are to be measured from top face of the curb to top face of the curb, on streets with curb and gutter, and from flowline to flowline, on streets with rolled curbs. See Appendix II-A-2 for street requirements in Very High Fire Hazard Severity Zones and Special Fire Protection Areas.

[IRVINE]

SECTION 902.2.2.1--Fire Apparatus Access Roads is hereby amended by adding the following sentence at the end of the first paragraph:

Section 902.2.2.1 Fire Apparatus Access Roads. Street widths are to be measured from top face of the curb to top face of the curb, on streets with curb and gutter, and from flowline to flowline, on streets with rolled curbs. See Appendix II-A-2 for street requirements in Very High Fire Hazard Severity Zones and Special Fire Protection Areas.

Street design standards for public and private streets shall be as adopted by the director of Public Works in City Street Standards and Design Manual. The Director of Public Works may approve alternate street designs on a case-by-case basis.

SECTION 902.2.2.3— is hereby amended as follows:

[IRVINE]

SECTION 902.2.2.3 is hereby deleted and replaced with the following:

Section 902.2.2.3 Turning Radius. The turning radius for the apparatus roads shall be not less than 17 feet (5,182 mm) inside radius and 38 feet (11,582 mm) outside radius.

Exception: Cul-de-sacs with center obstructions will require larger turning radii as approved by the Chief and Director of Public Works.

SECTION 902.2.2.6— is hereby amended as the follows:

[IRVINE]

SECTION 902.2.2.6 is hereby deleted and replaced with the following :

Section 902.2.2.6 Grade. The gradient for the fire department access road shall not exceed 7 percent.

Exception: When approved by the Chief and Director of Public Works, the gradient may be increased to a minimum of 15 percent when all structures served by the access road are protected by an approved automatic fire sprinkler system.

SECTION 902.2.4 --Obstruction and control of fire department access is hereby amended by adding sections 902.2.4.3—Vehicle Access, 902.2.4.4—Vehicle Access Gates, and 902.2.4.5—Speed Bumps, as follows:

Section 902.2.4.3 Vehicle Access. Any point of access deemed necessary for emergency response shall remain unobstructed at all times.

Section 902.2.4.4 Vehicle Access Gates. Vehicle access gates or barriers installed across streets shall be in accordance with the Orange County Fire Authority Guidelines for Emergency Access. The minimum width of any gate or opening necessary for required as a point of access shall be not less than 13 feet unobstructed width. This minimum width may be increased depending on the length of the approach.

As required by the Chief, an automatic opening device may be required on vehicle access gates.

Section 902.2.4.5 Speed Bumps. Any obstructions in required fire access roadways, including speed bumps and speed humps, shall be approved prior to installation.

SECTION 903—Water Supply and Fire Hydrants is hereby amended by adding a sentence to the end of Sections 903.2—Required water Supply for Fire Protection and 903.4.1.2—Testing, Marking, and Maintenance of Private Hydrants, as follows:

Section 903.2 Required Water Supply for Fire Protection. Private dwellings exceeding 3,600 square feet (335 m²) in total area shall be evaluated for fire flow requirements by the chief.

Section 903.4.1.2 Testing, Marking, and Maintenance of Private Hydrants. Testing, marking, and maintenance requirements for private fire hydrants shall be in accordance with Appendix Standard A III-C-1.

ARTICLE 10

FIRE-PROTECTION SYSTEMS AND EQUIPMENT is hereby amended as follows:

SECTION 1001.5—Maintenance, Inspection, Testing and System Out of Service is hereby amended by adding Section 1001.5.6—Smoke Detection Systems, as follows:

Section 1001.5.6. Smoke Detection Systems. It shall be the responsibility of the owner of the occupancy to maintain all required smoke detectors. The owner shall be responsible for the annual testing of all required smoke detectors.

SECTION 1003—Fire Extinguishing Systems is hereby amended as follows:

Section 1003.1.2 is substituted with a new language:
Section 1003.2.2 is amended by adding item 6 to the section.
Section 1003.2.3.3 is deleted.
Section 1003.2.8 is deleted.
Section 1003.2.9 is deleted and replaced with a new language.
Section 1003.3.1 is amended.

SECTION 1003.1.2 --Standards is hereby deleted and replaced with the following:

Section 1003.1.2 Standards. Automatic fire-extinguishing systems shall be installed in accordance with the NFPA standards cited in Article 91 of this code. An approved automatic sprinkler system required by Section 1003 and installed as per NFPA 13 as cited in Article 91 of this code, may be used for fire-resistive substitution as specified in the provisions of Section 508 of the adopted Uniform Building Code.

SECTION 1003.2.2--All Occupancies except Group R, Division 3, and Group U is amended by deleting the words "Division 3, and Group U," deleting item 5 and adding an item 6 to the section as follows:

Section 1003.2.2 All Occupancies except Group R Occupancies.

6. In all new buildings or structures when the gross square footage thereof exceeds those outlined in Table A or more than 2 stories in height.

For the purposes of this section, area separation walls shall not define separate buildings.

SECTION 1003.2.9 Group R Occupancies is hereby deleted and replaced with the following:

Section 1003.2.9 Group R Occupancies.

Section 1003.2.9.1 Group R, Division 1 Occupancy. All new Group R Occupancies Division 1 shall be equipped with an approved automatic sprinkler system. Residential or quick-response standard sprinkler heads shall be used in the dwelling unit and guest room portions of the building.

For the purposes of this section, area separation walls shall not define separate buildings.

Section 1003.2.9.2 Group R, Division 3, One- and Two-family Dwellings. All new Group R, Division 3, detached one- and two- family dwellings with an area exceeding those outlined in Table A (R3 occupancy) shall be equipped with an approved automatic residential sprinkler system. Residential or quick-response standard sprinkler heads shall be used in the dwelling portion of the building.

When it has been determined the any portion of an R-3 occupancy is to be protected with fire sprinklers, the entire structure shall be equipped with an automatic fire sprinkler system in accordance in accordance with NFPA 13D, as amended. For the purposes of this section, area or occupancy separation walls shall not define separate buildings.

EXCEPTION: In reconstruction or remodeling of existing Group R, Division 3, detached one- and two-family dwellings, where the cost of installing an approved automatic residential sprinkler system exceeds 5 percent of the reconstruction or remodeling cost, with the approval of the chief, the required sprinkler system may be omitted.

Table A
Building Area Exempt Amounts Table

City	Any Occupancy Except R3 (Square Feet)	R3 Occupancy (Square Feet) See footnote 4
Aliso Viejo	6,000	5,500
Buena Park	6,000	3,600
Cypress	6,000	3,600
Dana Point	6,000	0
Irvine	6,000	5,500
La Palma	6,000	5,500
Laguna Hills	6,000	5,500
Laguna Niguel	6,000	5,500
Laguna Woods	6,000	5,500
Lake Forest	6,000	5,500
Los Alamitos	6,000	5,500
Mission Viejo	6,000	5,500
Placentia	6,000	0
Rancho Santa Margarita	6,000	5,500
San Clemente	See footnote 1	See footnote 2
San Juan Cap.	6,000	5,500
Seal Beach	6,000	See footnote 3
Stanton	6,000	0
Tustin	6,000	5,500
Villa Park	6,000	5,500
Westminster	5,000 See footnote 3	5,500
Yorba Linda	6,000	5,500
Unincorporated Orange County	6,000	5,500

1.
 - a. Throughout all Groups A, I, E, and H Occupancies.
 - b. Throughout all Group B, F, M, and S occupancies exceeding 1,000 square feet.
 - c. Throughout all Group U-1 Occupancies exceeding 6,000 square feet.
2.
 - a. All newly constructed Group R occupancies, including the attached garages.
 - b. All existing Group R Occupancies and U-1 garages when the total floor area is increased by 50% of the existing area over a 2 year period.
 - c. All existing Group R Occupancies and U-1 garages when the total floor area is increased by 750 square feet or more over a 2 year period.
 - d. All existing Group R Occupancies and U-1 garages when an additional story is added to the structure regardless of the area involved.
3.
 - a. All new Group R, Division 3 detached one- and two- family dwellings located in Planning Districts 1, 2, and 3 between Pacific Coast Highway and the Pacific Ocean , as depicted on the Planning District map on file on the Department of Development Services, shall be equipped with an approved automatic sprinkler system.
 - b. All new Group R, Division 3, detached one- and two- family dwellings located outside Planning Districts 1, 2, and 3 that are 5,500 square feet or larger in area shall be equipped with an approved automatic residential sprinkler system.
4. Dwellings with an area of less than the exempt amount shall be equipped with an approved automatic residential sprinkler system when the permit applicant selects alternative designs of narrower streets and/or increased fire hydrant spacing.

SECTION 1003.3—Sprinkler System Monitoring and Alarms is amended by the addition of a sentence at the end of the Section 1003.3.1—Where required, as follows.

Section 1003.3.1 Where required. All valves controlling the water supply for automatic sprinkler systems and water-flow switches on all sprinklers systems shall be electrically monitored where the number of sprinklers are:

1. Twenty or more in Group I, Division 1.1 and 1.2 Occupancies.
2. One hundred or more in all other occupancies, including Group R, Division 3 occupancies.

Valve monitoring, water-flow alarm and trouble signals shall be distinctly different and shall be automatically transmitted to an approved central station, remote station or proprietary monitoring stations as defined by NFPA 72 as amended in Article 91 or, shall sound an audible signal at a constantly attended location. The signal for remote station monitoring as defined in NFPA 72 shall be transmitted to, received, and retransmitted by a continuously attended supervising station facility that is either U.L. listed (UULF) or meets equivalent criteria established by another nationally recognized standard as approved by the chief.

Exception: (no change)

SECTION 1003.4—Permissible Sprinkler Omissions is hereby amended by deleting number 4 without replacement and renumbering number 5 as number 4.

SECTION 1004—Standpipes is hereby amended by deleting Section 1004.2--Required Installation and replacing with the following:

Section 1004.2 Required Installations. Standpipe systems shall be provided as set forth in Table No. 1004-A and the provisions of this section. Every new building with any horizontal dimension greater than 300 feet (91 440 mm) shall be provided with either access doors or hose outlets located so that all portions of the building can be reached with 150 feet (45 720 mm) of hose from an access door or hose outlet. Required access doors shall be located in the exterior of the building and shall be accessible without the use of a ladder. The door dimensions shall be not less than 3 feet (914 mm) in width nor 6 feet 8 inches (2032 mm) in height.

The hose outlets shall be 2-1/2 inches (63 mm) in size with an approved valve. The water supply for the hose outlets shall be provided:

1. By a separate main supplied from the system side of the check valve at the fire department connection, or
2. From an adjacent section of the sprinkler system arranged to allow the hose outlets to deliver the water when the sprinkler system, or a portion of the system that protects the area served by the hose outlet, is shut off.

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Section 1004.2 The following statement is added to this section: Class I standpipe systems shall be provided in all structures over 2 stories or three levels except in single family dwellings, including garages, or as set forth in Table 1004-A, whichever is more restrictive

1006.2.12.2 HIGH RISE BUILDINGS is hereby amended as follows:

SECTION 1006.2.12.2 — High Rise Buildings is hereby amended by revising the scope of section 1006.2.12.2.1—General, adding an item to section 1006.2.12.2.2—Automatic Fire Alarm System, adding an item to section 1006.2.12.2.—Emergency Voice Alarm-Signaling System, and adding a new section 1006.2.12.2.5—Central Control Station, as follows:

Section 1006.2.12.2.1 General. All occupancies having floors used for human occupancy located more than 55 feet above the lowest level of fire department vehicle access, shall be provided with an automatic fire alarm system and a communication system in accordance with Section 1006.2.12.2.

Exceptions: The following structures, while classified as high-rise buildings, shall not be subject to the provisions of this section but shall conform to all other applicable provisions of these regulations:

1. Buildings used exclusively as open parking garages.
2. Buildings where all floors above the 55-foot (16 764 mm) level are used exclusively as open parking garages.
3. Floors of buildings used exclusively as open parking garages and located above all other floors used for human occupancy.
4. Buildings such as power plants, lookout towers, steeples, grain houses and similar structures with noncontinuous human occupancy, when approved by the chief.

Section 1006.2.12.2.2 Automatic Fire Alarm Systems. Add an item 4 as follows:

4. All smoke detectors connected to the alarm system shall have a light that indicates the status of the detector. When a detector is located in a space above a drop ceiling, the indicating light shall be located on or below the ceiling grid.

Section 1006.2.12.3 Emergency voice alarm-signaling system. The operation of any automatic fire detector, sprinkler or water-flow device shall automatically sound an alert tone followed by voice instructions giving appropriate information and directions on a general or selective basis to the following terminal areas on the fire floor and floor directly above and below, unless otherwise approved:

1. Elevators,
2. Elevator lobbies,
3. Corridors,
4. Exit stairways,
5. Rooms and tenant spaces exceeding 1,000 square feet(93m²) in area,
6. Dwelling units in apartment houses,
7. Hotel guest rooms or suites, and
8. Areas of refuge. (As defined in the Building Code.)

Section 1006.2.12.2.5 Central Control Station. A central control station for fire department operations shall be provided in a location approved by the chief. The central control station shall be separated from the remainder of the building by not less than one-hour fire-resistive construction with all openings protected by assemblies having a fire-resistive rating of not less than 45 minutes. It shall have a minimum of one door, which is accessible directly from the exterior portion of the building and shall be able to be opened with a fire department master key. The central control station shall have a minimum of 96 square feet (9.3 m²) with a minimum dimension of 8 feet (2438 mm). It shall contain the following as a minimum:

1. The voice alarm and public address system panels.
2. The fire department communications panel, a cabinet containing 8 portable firefighter phones and 1 headset with sufficient cord to reach all portions of the room.
3. Fire detection and fire alarm system annunciator panels.
4. Annunciator visually indicating the location of the elevators and their operational status.
5. Status indicators and controls for air-handling systems.
6. Controls for unlocking all stairway doors simultaneously.
7. Sprinkler valve and water-flow detector display panels.
8. Emergency and standby power controls and status indicators.
9. A wall-mounted telephone, with sufficient cord to reach all portions of the room and with an outside-dedicated private line, installed in the fire control room for exclusive fire department use.
10. Elevator control switches for switching to emergency power.
11. Fire pump status panel and controls.
12. Other fire-protection equipment and systems' controls as required by the fire department.
13. Schematic building plans in clearly labeled approved containers, indicating the typical floor plan and detailing the building core, fire resistive separations, exit facilities, on-site water supply, fire-protection systems, firefighting equipment, and fire department access.

14. One 3 foot (914 mm) by 5 foot (1524 mm) table and 2 chairs.
15. An approved locked and labeled cabinet containing labeled keys for emergency access and elevator control. All control panels in the central control station shall be permanently identified as to function. Alarms, supervisory and trouble signals as required by Items 3 and 7 above shall be annunciated in compliance with this code in the central control station by means of an audible and visual indicator. For purposes of annunciation, zoning shall be in accordance with the following:
 - a. When the system serves more than one building, each building shall be considered separately.
 - b. Each floor shall be considered a separate zone. When one or more sprinkler risers serve the same floor, each riser shall be considered a separate zone.

EXCEPTION: When more than one riser serves the same system on the floor.

- c. Each section of floor separated by area separation walls or by horizontal exits shall be considered as a separate zone.

Central control stations shall not be used for the housing of any boiler, heating unit, generator or similar hazardous equipment. No storage shall be permitted in the central control station room.

SECTION 1007-EMERGENCY ACCESS AND EVACUATION is hereby added as follows:

Section 1007.1 Emergency Access and Evacuation. This section shall apply to every new building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet (22 860 mm) above the lowest floor level having building access.

Exceptions:

1. Hospitals as defined in Section 1250 of the Health and Safety Code.
2. Buildings used exclusively as open parking garages.
3. Buildings where all floors above the 75-foot (22 860 mm) level are used for open parking garages.
4. Floors of buildings used exclusively as open parking garages and located above all other floors used for human occupancy.
5. Buildings such as power plants, lookout towers, steeples, grain houses and similar structures with noncontinuous human occupancy when so determined by the chief.
6. Buildings used exclusively as jails and prisons.

Such structures shall be equipped with a fire department-approved emergency helicopter landing pad for use by police, fire, and emergency medical helicopters only.

Section 1007.2 Helistop. The roof area shall include an emergency access and evacuation facility for helicopters of not less than 15,000 pounds (6803.8 Kg) gross weight. The helistop shall have a touchdown pad of at least 50 feet (15 240 mm) by 50 feet (15 240 mm) and a clear unobstructed landing and takeoff area with a minimum dimension of 100 feet (30 480 mm) by 100 feet (30 480 mm).

Section 1007.3 Construction. The helistop shall be designed based on the adopted Building Code. Helistops and supports shall be of noncombustible construction.

Section 1007.4 Approach-departure Paths. The emergency evacuation facility shall have 2 approach-departure paths at a slope of no greater than 8 to 1. No obstructions, including structural members or communication equipment, shall penetrate the approach or departure paths.

Section 1007.5 Restricted Use. Any use of this emergency access and evacuation facility for purposes other than emergency access and evacuation shall require prior approval by the Federal Aviation Administration, as well as by the building official and the chief.

Section 1007.6 Wind Direction Device. A wind indicating device shall be provided.

Section 1007.7 Special Markings. The roof top shall be marked by an emergency marker as required by the chief.

Section 1007.8 Communications. The building emergency communication system shall extend to the roof.

ARTICLE 11

GENERAL SAFETY PRECAUTIONS is hereby amended by deleting 1109.7—Sparks from Chimneys and substituting with new language, adding new sections 1114—Changes in Use or Occupancy of Building or Structure, 1115— Development On Or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors and 1116—Model Rocketry, as follows:

SECTION 1109.7—Sparks from Chimneys is hereby deleted and replaced with the following:

Section 1109.7 Sparks from Chimneys. All new structures having any chimney, flue or stovepipe attached to any fireplace, stove, barbecue or other solid or liquid fuel burning equipment and devices, shall have such chimney, flue or stovepipe equipped with an approved spark arrester. All incinerator chimneys shall terminate in a substantially constructed spark arrester having an iron, heavy wire mesh not exceeding 1/2 inch (12.5 mm).

SECTION 1114—Changes in Use or Occupancy of Building or Structures is hereby amended in all jurisdictions except La Palma by adding a new Section 1114—Declaration of Intended Use, as follows:

Section 1114 Declaration of Intended Use

Section 1114.1 When Required. When required by the chief with the concurrence of the building official, any or all owners of any occupancy may be required to record with the county recorder of the County of Orange a legal instrument of intended use. This legal instrument shall be called a Declaration of Intended Use. The Declaration of Intended Use shall be in accordance with the requirements of this section. It shall specifically state, by occupancy classification, all intended uses of all portions of the occupancy and may not be modified or withdrawn without the approval of the chief with the concurrence of the building official. Unapproved changes of occupancy or use can be cause for an immediate hearing before the building official and the chief or their designees. Such hearing shall be conducted to rule on the revocation of the Certificate of Occupancy and the revocation of all permits issued to all owners, tenants, operators and occupants of all portions of the occupancy. The Declaration of Intended Use shall be binding on all present and future owners, tenants, operators and occupants.

Section 1114.2 Certified Copies. A certified copy of the recorded Declaration of Intended Use may be required to be filed with the building official and the chief before any Certificate of Occupancy and/or any permits are issued to any or all owners, tenants, operators or occupants of the occupancy.

SECTION 1115--Development On Or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors is hereby added as follows:

Section 1115 Development On Or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. The chief may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a state-licensed and department approved individual or firm, on any parcel of land to be developed which:

1. Has, or is adjacent to, or within 1,000 feet (304 800 mm) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or
2. May contain or give off toxic, combustible or flammable liquids, gases or vapors.

SECTION 1116—Model Rocketry is hereby added as follows:

Section 1116 Model Rocketry. All model rocket activities shall comply with the Orange County Fire Authority Guidelines for Model Rocketry. A permit from the chief is required prior to firing any model rocket.

ARTICLE 25

PLACES OF ASSEMBLY is hereby amended by deleting 2501.5—Decorative Materials and replacing with new language, amending 2501.16—Maximum Occupant Load by adding a new section, and adding a new section 2501.19—Temporary and/or Portable Heaters,, as follows:

SECTION 2501.5—Decorative Materials is hereby deleted and replaced with the following:

Section 2501.5 Decorative Materials. Records of fire-retardant treatment, as per the requirements of CCR Title 19, shall be maintained on the premises by the owner, agent, proprietor or occupant.

SECTION 2501.16.4—Maximum Occupant Load is hereby amended by adding a new section as follows:

Section 2501.16.4 Occupant Count. The supervisor of each place of assembly shall have an effective system to keep count of the number of occupants present in the assembly area. If the chief determines at any time that an accurate count of occupants is not being maintained, the occupancy shall be cleared until an accurate count can be made.

SECTION 2501—General is hereby amended by adding a new section 2501.19 as follows:

Section 2501.19 Temporary and/or Portable Heaters . No person shall place or operate or permit to be operated any temporary and/or portable heater within a structure that uses any flammable or combustible solids, liquids, or gases without a fire department permit.

Section 2501.19 Temporary and/or Portable Heaters . No person shall place or operate or permit to be operated any temporary and/or portable heater within a structure that uses any flammable or combustible solids, liquids, or gases without a fire department permit.

ARTICLE 32

TENTS, CANOPIES AND TEMPORARY MEMBRANE STRUCTURES is hereby amended by adding a final paragraph to section 3201—Scope, deleting section 3205.2—Location and Parking and substituting with new language, adding a new final paragraph to Section 3207—Flame Retardant Treatments, adding a new final paragraph to section 3220—Standby Personnel, and amending 3221—Housekeeping, as follows:

SECTION 3201—Scope is hereby amended by adding a new final paragraph as follows:

Section 3201 Scope. The regulations of the State Fire Marshal for large and small tents, awnings and other fabric enclosures also apply (19 CCR Chapter 2)

SECTION 3205.2—Location and Parking is deleted and replaced with the following:

Section 3205.2 Location and Parking. Temporary membrane structures, tents and canopies shall not be located within 20 feet (6096 mm) of property lines, buildings, temporary membrane structures, other tents, canopies or internal combustion engines. Vehicles necessary to the operation of a tent establishment shall be parked at least 20 feet from any tent. All other vehicles shall be parked at least 100 feet (30 480 mm) from any tent except vehicles parked on a public street, which shall park at least 20 feet (6096 mm) from any tent, per the regulation of the State Fire Marshal (19 CCR 312)

SECTION 3207—Flame Retardant Treatments is hereby amended by adding a paragraph as follows:

The regulations of the State Fire Marshal for large and small tents, awnings and other fabric enclosures also apply (19 CCR Chapter 2, Article 4)

SECTION 3220—Standby Personnel is hereby amended by adding a final paragraph as follows:

Section 3220 Standby Personnel. The regulations of the State Fire Marshal for standby personnel in tents with an occupant load of 500 or more also apply (19 CCR 320)

SECTION 3221—Housekeeping is hereby amended by deleting "30 feet (9144 mm)" and substituting "50 feet (15240 mm)" in its place at each occurrence (19 CCR 326).

ARTICLE 47

FUMIGATION AND THERMAL INSECTICIDAL FOGGING is hereby deleted and replaced with the following:

ARTICLE 47—FUMIGATION AND THERMAL INSECTICIDAL FOGGING

Section 4701—Scope . Fumigation and thermal insecticidal fogging operations shall be in accordance with Divisions 6 and 7 of the Food and Agriculture Code of the State of California.

Section 4702—Notification of Fumigation. The chief shall be notified in writing at least 24 hours before any building, structure or ship is to be closed in connection with the use of toxic or flammable fumigants.

ARTICLE 52

MOTOR VEHICLE FUEL-DISPENSING STATIONS is hereby amended by adding a final sentence to section 5202.3.1—General and deleting section 5202.3.6—Special Enclosures and substituting new language, as follows:

SECTION 5202—Flammable and Combustible Liquid Motor Vehicle Fuel-Dispensing Stations is hereby amended as follows:

SECTION 5202.3.1—General is hereby amended by adding a sentence to the end of Section 5202.3.1 as follows:

Section 5202.3.1 General. For locations where aboveground tanks are prohibited, see Section 7902.2.2.1

SECTION 5202.3.6—Special enclosures is hereby deleted and replaced with the following:

Section 5202.3.6 Special enclosures. When installation of tanks in accordance with Section 7902.6 is impractical, or because of property or building limitations, tanks for Class I, II, or III-A liquids may be approved by the chief for installation in buildings in special enclosures in accordance with OCFA Guidelines and the following: (no further changes).

ARTICLE 63

REFRIGERATION is hereby amended by replacing "UFC Standard 79-3" with "the Orange County Fire Authority Signage Guidelines" at each occurrence.

ARTICLE 64

STATIONARY LEAD-ACID BATTERY SYSTEMS is hereby amended by deleting section 6401 and replacing with the following:

Section 6401 – Scope. Lead-acid battery systems having a liquid capacity of more than 100 gallons (378.5 L) in sprinklered buildings or more than 50 gallons (189.3 L) in unsprinklered buildings used for facility standby power, emergency power, uninterrupted power supply, battery storage warehouses where recharging occurs, or indoor storage of electric carts/cars shall be in accordance with Article 64. Stationary lead-acid battery systems with individual lead-acid batteries exceeding 20 gallons (75.7 L) each shall also comply with Article 80

ARTICLE 74

COMPRESSED GASES is hereby amended by replacing "UFC Standard 79-3" with "the Orange County Fire Authority Signage Guidelines" at each occurrence.

ARTICLE 77

EXPLOSIVE MATERIALS is hereby amended as follows:

SECTION 7701.1—Scope is hereby amended by referencing Appendix VI-H rather than VI-F and adding the following sentence at the end of the first paragraph:

Section 7701.1 Scope. Appendix VI-H shall be used for determining the location of magazines. Whenever the words "See Appendix VI-H" appear, it shall mean "Apply Appendix VI-H."

[BUENA PARK AND SEAL BEACH]

Section 7701 General is hereby amended by amending Section 7701.4 and adding a new Section 7701.9 to read as follows:

Section 7701.4 Use and storage limitations. The use and storage of explosives and blasting agents are prohibited within the City limits. The Chief may grant a special temporary permit for the temporary storage of explosives and blasting agents for use in connection with approved blasting operations. Nothing herein shall prohibit the wholesale and retail storage of stock in small arms ammunition and components, explosive bolts, explosive rivets, or cartridges for explosive actuated power tools in quantities involving less than 500 pounds (226.8 kg) of explosive material.

[SAN CLEMENTE]

Section 7701—General is hereby amended by replacing **Section 7701.7** with the following, adding a new **Section 7701.7.4** and adding **Section 7701.9** as follows:

7701.7.1 Manufacturing. The manufacturing of explosives or blasting agents shall be prohibited within the City limits. This prohibition shall not apply to hand loading of small arms ammunition for personal use when such ammunition is not for sale.

Section 7701.7.4 Use and Storage Limitation. The use and storage of explosives and blasting agents are prohibited within the City limits except in the M-2 zone. Use and storage in the M-2 zone shall be permitted only upon the approval of a conditional use permit. The chief may grant a special temporary permit for the temporary storage of explosives and blasting agents for use in connection with approved blasting operations. Nothing contained herein shall prohibit the wholesale and retail storage of stocks in small arms ammunition and components, explosive bolts, explosive rivets, or cartridges for explosive actuated power tools in quantities involve less than 500 pounds (226.8 kg) of explosive material.

SECTION 7702.1.1--Magazines required is hereby amended by adding a final sentence as follows:

Section 7702.1.1 Magazines required. The regulations of the State Fire Marshal for magazine quantity limitations also apply (19 CCR 1566.4).

SECTION 7702.1.9--Storage with other materials is hereby amended by adding a final sentence as follows:

Section 7702.1.9 Storage with other materials. Blasting caps, electric blasting caps, detonating primers and primed cartridges shall not be stored in the same magazine with other explosives (19 CCR 1566.1).

SECTION 7702.1.15 Yard maintenance is hereby amended by deleting "25 feet" (7620 mm) and substituting "50 feet" (15 240 mm) in its place (19 CCR 1566.2).

SECTION 7702.2 Retail Sales is hereby amended by adding a second paragraph to Section 7702.2.1--General as follows:

Section 7702.2.1 General. The regulations of the State Fire Marshal for magazines within buildings also apply (19 CCR 1566.6).

SECTION 7702.3--Storage Magazines is hereby amended by adding the following paragraphs to Sections 7702.3.1--General and 7702.3.10--Indoor magazines:

Section 7702.3.1 General. The regulations of the State Fire Marshal for magazine classification, quantity limitations and construction also apply. The provisions of this section may be used in place of the State Fire Marshal regulations for classification and construction of magazines, if determined to provide an acceptable alternative protection by the chief (19 CCR Chapter 10, Subchapters 3 and 5).

Section 7702.3.10 Indoor magazines. The regulations of the State Fire Marshal for magazines within buildings also apply (19 CCR 1566.6).

SECTION 7703.1--Use and Handling is hereby amended by adding the following paragraphs to Sections 7703.1.7 Other regulations and 7703.1.9 Premature detonation safeguards:

Section 7703.1.7 Other regulations . The regulations of the State Fire Marshal for use and handling of explosives also apply (19 CCR Chapter 10, Subchapter 4).

Section 7703.1.9 Premature Detonation Safeguards. The regulations of the State Fire Marshal for precautions against accidental discharge also apply (19 CCR 1568.8).

SECTION 7703.2.1--Public Conveyance is hereby amended by adding a beginning paragraph as follows:

Section 7703.2.1 Public Conveyance. The regulations of the State Fire Marshal for transportation of explosives, including transportation in private passenger vehicles, also apply (19 CCR Chapter 10, Subchapter 4, Article 12).

SECTION 7703.3.5--Explosive materials terminals is hereby amended by adding a beginning paragraph as follows:

Section 7703.3.5 Explosive materials terminals. The regulations of the State Fire Marshal for explosives at terminals also apply (19 CCR Chapter 10, Subchapter 4, Article 9).

SECTION 7703.5--Safety Precautions for Blasting Agents is hereby amended by adding the following paragraphs to Sections 7703.5.3--Construction and 7703.5.4--Compounding and mixing, and by adding a new Section 7703.5.7--Requirements:

Section 7703.5.3 Construction. Buildings or other facilities used for the mixing of blasting agents shall be designed and constructed in accordance with the regulations of the State Fire Marshal (19 CCR Chapter 10 and 24 CCR Part 2).

Section 7703.5.4 Compounding and mixing. The regulations of the State Fire Marshal for mixer design and blasting agent composition also apply (19 CCR 1572.2 and 1572.3).

Section 7703.5.7 Requirements. The regulations of the State Fire Marshal for blast hole loading, explosive initiation, and water gels, or slurry explosives also apply (19 CCR Chapter 10, Subchapter 4, Articles 7, 8, 10 and 11; and Subchapter 5, Article 17).

SECTION 7704.6.1 Construction is hereby deleted and replaced as follows:

Section 7704.6.1 Construction. Operating buildings or rooms shall be constructed in accordance with the regulations of the State Fire Marshal (19 CCR Chapter 10 and 24 CCR Part 2) when quantities of explosives exceed the exempt amounts as specified in the adopted Uniform Building and Fire Codes.

SECTION 7704.7--Operations is hereby amended by adding a beginning paragraph as follows:

Section 7704.7 Operations. The regulations of the State Fire Marshal for on-site or remote processing and storage of explosives, including electrical regulations, also apply (19 CCR Chapter 10, Subchapter 4).

ARTICLE 78

FIREWORKS AND PYROTECHNIC SPECIAL EFFECTS MATERIALS is hereby amended as follows:

SECTION 7801.3.1.4—Displays is hereby amended by adding section 7801.3.1.4.1—Firing, as follows:

Section 7801.3.1.4.1 Firing. All fireworks displays shall be electronically fired.

SECTION 7802—Fireworks is hereby amended by deleting and replacing 7802.2—Seizure of Fireworks, deleting Table 7802.3A—Minimum Mortar Separation Distances without substitution, amending the first sentence of Section 7802.3--Prohibition; and, deleting Section 7802.4--Displays and replacing, as follows:

Section 7802.2 Seizure of Fireworks. The Fire Chief shall have the authority to seize, take, remove any fireworks stored, sold, offered for sale, used or handled in violation of the provisions of this code. Any seizure or removal pursuant to this section shall be in compliance with all applicable statutory, constitutional, and decisional law.

Section 7802.3 Prohibition The storage, use, handling, possession, sale, or discharge of fireworks is prohibited.

Section 7802.4 Displays. Fireworks displays shall be in accordance with the Orange County Fire Authority Guidelines for Public Fireworks Displays, with the regulations of the State Fire Marshal, and with the conditions of the permit as approved by the chief (19 CCR 982).

[BUENA PARK]

SECTION 7801.3.1.4 – Displays is hereby amended by adding Section 7801.3.1.4.1-Firing, as follows:

Section 7801.3.1.4.1 Firing. All firework displays shall be electronically fired.

Section 7802 Fireworks is hereby amended by deleting TABLE 7802.3A MINIMUM MORTAR SEPARATION DISTANCES without substitution, **deleting Section 7802.3 Prohibition** without substitution, deleting Section 7802.4 Display and replacing with a new Section 7802.4 Displays.

[STANTON]

Section 7802—Fireworks is hereby amended by deleting TABLE 7802.3A—MINIMUM MORTAR SEPARATION DISTANCES without substitution, deleting Section 7802.4 Display and replacing with a new Section 7802.4 Displays, and adding a new Section 7802.5 Model Rocketry as follows:

Section 7802.3 Prohibition—The storage, use, handling, possession, sale or discharge of fireworks (as defined by Section 12529 of the Health and Safety Code) is permitted in the City pursuant to and only in strict accordance with Chapter 17.04 of the Stanton Municipal Code.

ARTICLE 79

FLAMMABLE AND COMBUSTIBLE LIQUIDS is hereby amended as follows:

ARTICLE 79—FLAMMABLE AND COMBUSTIBLE LIQUIDS is hereby amended by replacing "UFC Standard 79-3" with "the Orange County Fire Authority Signage Guidelines" at every occurrence.

SECTION 7902.1.9— Additional Requirements for Protected Aboveground Tanks is hereby amended as follows:

Section 7902.1.9 The installation of protected aboveground tanks shall be in accordance with Section 7902.1.9 and the Orange County Fire Authority Guidelines for Protected Aboveground Tanks for Motor Vehicle Fuel-Dispensing Stations.

[BUENA PARK]

Section 7902.2.2 Tank Locations is hereby amended by deleting Section 7902.2.2.1 Locations where aboveground tanks are prohibited and substituting as follows:

Section 7902.2.2.1 Locations where aboveground tanks are prohibited. The storage of Class I and Class II flammable or combustible liquids in aboveground tanks outside of buildings is prohibited in all areas except those zones M-H under the City Zoning Ordinance as same presently exists or as same may be amended from time to time.

Section 7904.4 Bulk Plants or Terminals is hereby amended by adding an ending paragraph to Section 7904.4.1 General as follows:

TABLE 7902.5-C—Maximum Storage Height in Control Area is hereby amendment by placing a footnote reference in the heading of the last column adding footnote 1 as follows:

Table 7902.5-C (footnote) ¹ In-rack protection shall be in accordance with Table 7902.5-H, 7902.5-I or 7902.5-J.

SECTION 7904.5.1.7—Static Protection is hereby amended to add the following paragraph at the end of the section:

Section 7904.5.1.7—Static Protection. Drag chains or similar devices on tank vehicles shall not be used to meet the requirements of this section for static protection.

ARTICLE 80

HAZARDOUS MATERIALS is hereby amended by replacing "UFC Standard 79-3" with "the Orange County Fire Authority Signage Guidelines" at every occurrence and the following:

SECTION 8001.3.3 Hazardous Materials Inventory Statement is hereby amended by adding the following paragraph:

Section 8001.3.3 Chemical Classification Packet. When required by the chief, an Orange County Fire Authority Chemical Classification Packet shall be completed and approved prior to approval of architectural and system plans, and/or the storage, use or handling of chemicals on the premises.

SECTION 8001.15 Exempt Amounts is hereby amended by deleting footnote 16 to Table 8001.15-A as follows:

Table 8001.15-A: Footnote 16 is hereby deleted.

SECTION 8001.15—Exempt Amounts is hereby amended by adding a new section 8001.15.2-Extremely Hazardous Substances as follows:

Section 8001.15.2 Extremely Hazardous Substances. No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Section 25115 of the Health and Safety Code) in a residential zoned or any residentially developed property.

SECTION 8003.1 General is hereby amended adding a paragraph between the first and second sentence in Section 8003.1.8--Standby Power, and deleting exceptions from 8003.3.1.3.5—Treatment Systems, as follows:

Section 8003.1.8 Standby power. An emergency power system shall be provided in Group H, Division 6 and Division 7 Occupancies.

SECTION 8003.3.1.3.5 Treatment systems is hereby amended by deleting all 3 exceptions from 8003.3.1.3.5.1—General.

ARTICLE 81

HIGH PILED COMBUSTIBLE STORAGE is hereby amended as follows:

SECTION 8101.1--Scope is hereby amended by deleting the last sentence regarding paper records.

ARTICLE 82

[JURISDICTIONAL DIFFERENCES] BUENA PARK, PLACENTIA, SAN CLEMENTE AND SEAL BEACH

[BUENA PARK AND SEAL BEACH]

LIQUEFIED PETROLEUM GASES is hereby amended by adding an ending paragraph to Section 8204.3 Container Location as follows:

Section 8204.3 Container Location. The storage of liquefied petroleum gas shall be prohibited in all areas except those zoned C-M, M-R, M-L and M-H under the City Zoning Ordinance as same presently exists or as same may be amended from time to time.

[PLACENTIA]

LIQUEFIED PETROLEUM GASES is hereby amended by adding a paragraph to Section 8204.1 as follows:

Section 8204.1 General. The storage of 500 gallons water capacity is hereby restricted in the City of Placentia to only those locations designated for zoning purposes as "industrial" and "oil field area." This section shall not apply to any emergency standby fuel required by public utility where the containers are installed in compliance with all applicable codes.

[SAN CLEMENTE]

LIQUEFIED PETROLEUM GASES is hereby amended as follows:

Section 8203.4 Restricted location. No person shall store liquefied petroleum tanks of over 120 gallon (454.2 L) water capacity outside the C-2 and M-2 zones without the approval of the Chief. Storage of liquefied petroleum gas shall conform to the provision of the zoning ordinance in addition to other applicable provisions of the code.

ARTICLE 87

FIRESAFETY DURING CONSTRUCTION, ALTERATION, AND DEMOLITION OF A BUILDING is hereby amended as follows:

SECTION 8704—Firesafety during Construction is hereby amended by deleting the exception to Section 8704.2--Access Roads and replacing it with the following:

Section 8704.2 Access Roads.

Exception: Temporary access and water supplies for construction of residential model projects may be approved in accordance with Orange County Fire Authority Guidelines for the Design and Installation of Temporary Access and Fire Hydrants.

Standards

ARTICLE 90

STANDARDS is hereby amended by deleting the following references in 9002—UFC Standards: 10-3 (NFPA 13); 10-4 (NFPA 13D); 10-5 (NFPA 13R); 10-6 (NFPA 14);

ARTICLE 91

CALIFORNIA STANDARDS is hereby amended by revising 9102—Amendments to National Standards, by clarifying that the standards and amendments apply to all systems in all occupancies, and the following:

SECTION 9102.1 NFPA 72, 1999 Edition, as amended is hereby further amended as follows:

Section 3-7 Performance is hereby amended by adding a second sentence as follows:

Section 3-7 The assignment of class designations or style designation, or both, to notification appliance circuits shall be based on their performance capabilities under normal (fault) conditions in accordance with the requirements of Table 3-7. The minimum voltage drop for any circuit on the system shall not exceed 10%.

SECTION 9102.7—NFPA 13, 1999 Edition, as amended is hereby further amended as follows:

SECTION 3-9--Fire Department Connections is hereby amended by addition of the following language at the end of the first sentence:

Section 3-9.2. Fire department connections shall be equipped with listed plugs or caps, properly secured and arranged for removal by fire departments and shall be protected from mechanical injury.

SECTION 3-9.3 is hereby amended by addition of the following language after the first sentence, with two exceptions, as follows:

Section 3-9.3. Fire department connections shall be of an approved type. The fire department connection shall contain a minimum of two 2 ½” inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

Exception 1: When the fire sprinkler density design requires 500 gpm (including the interior hose stream demand) or greater, or a standpipe system is included, four 2 ½” inlets shall be provided.

Exception 2: The fire department connection may be located within 150 feet of a private fire hydrant providing the fire department connection pipe is connected to the fire sprinkler

system by a stand-alone pipe that connects down-stream of the fire sprinkler system check valve.

Section 5-3.1.5.1—Thermal Sensitivity is hereby amended by addition of a second sentence, as follows:

Section 5-3.1.5.1 Thermal Sensitivity. When fire sprinkler systems are installed in shell buildings of undetermined use other than warehouses, fire sprinklers of the quick-response type shall be used.

SECTION 5-6.5.2.2—Obstructions to Sprinkler Discharge Pattern Development is hereby amended by deleting exception 1 without replacement.

SECTION 5-14.1.1.4 --Valves Controlling Sprinkler Systems is hereby amended by deleting the section and substituting with the following:

Section 5-14.1.1.4 Valves Controlling Sprinkler Systems. Control valves shall be installed and positioned so that they are operable from the floor below. The center line of the valve shall be no more than 7 feet (2134 mm) above finished floor.

SECTION 5-14.1.3—Post Indicator Valves is hereby amended by adding a new subsection 5-14.1.3.3 and exception, as follows:

Section 5-14.1.3.3 Post indicating valve(s) shall be located not less than 40 feet from the building served.

Exception: Where it is impractical to locate post indicating valve(s) 40 feet from the building served, they shall be permitted to be located closer, or wall post indicating valves used, providing they are set in locations by blank walls or without openings of not less than 15 feet on either side of the valve, clear to the roof, or permitted to be placed in valve rooms accessible only from the exterior, or exterior risers providing they are set in locations by blank walls or without openings of not less than 15 feet on either side of the valve, clear to the roof. The location is subject to approval by the authority having jurisdiction.

SECTION 5-14.1.5.1—Sectional Valves is hereby amended by modifying the first sentence and adding a second sentence as follows:

Section 5-14.1.5.1. Sectional Valves. Large private fire service main systems shall have post indicating sectional controlling valves at appropriate points when the system serves more than five appurtenances in order to permit sectionalizing the system in the event of a break or for making of repairs or extensions. Note: A hydrant or a single fire line service to a building counts as one appurtenance.

SECTION 5-15.2.3--Arrangement is hereby amended by modifying the first sentence of section 5-15.2.3.5, as follows:

Section 5-15.2.3.5 Fire department connections shall be on the street side of building and arranged so they are located immediately adjacent to the approved fire department access road so that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence, posts, or other fire department connections.

SECTION 6-1.1 General is hereby amended by modifying section 6-1.1.3 by revising the first sentence of the second paragraph and creating a new second sentence as follows:

Section 6-1.1.3 Any other sizes or shapes giving equal or greater sections modulus shall be acceptable when certified by a registered professional engineer. Detailed structural calculations shall be submitted.

SECTION 6-1.3 Powder Driven Studs and Welding Studs is hereby amended by deleting the first sentence of section 6-1.3.1 and replacing with new language, and deleting section 6-1.3.2 and replacing with new language, as follows:

Section 6-1.3.1 Welding studs, and the tools used for their installation shall be listed.

Section 6-1.3.2 The use of powder-driven studs is prohibited.

SECTION 6-4.5—Sway Bracing is hereby amended by inserting a new paragraph after the second paragraph of section 6-4.5.9 and modifying figure 6-4.5.9, as follows:

Section 6-4.5.9 Earthquake bracing shall not be attached to light structural members without a registered professional engineer's detail and wet-stamp certifying compliance with NFPA 13, or through approval by the specific truss manufacturer.

FIGURE 6-4.5.9 is hereby amended by deleting the portion relating to lag screws.

SECTION 6-4.7—Hangers and Fasteners Subject to Earthquakes is hereby amended by deleting section 6-4-7.3 and substituting with new language and deleting 6-4-7.4 in its entirety, as follows:

Section 6-4.7.3. Lag screws shall not be used to attach braces to the building structure.

SECTION 7-1--General is hereby amended by the addition of the following:

Section 7-1 General. When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with a minimum design area of 3,000 square feet (279 m²). Warehouse fire sprinkler systems shall be designed to Figure 7-4.2.2.1.1 (d) curve "G".

Use is considered undetermined if not specified at the time the permit is issued. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

SECTION 7-2.3.1--General is hereby amended by the addition of a second paragraph to section 7-2.3.1.1, as follows:

Section 7-2.3.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the chief:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiplying the result by 0.433. The result shall be certified by a professional engineer licensed in the State of California;
2. Use a maximum of 40 psi, if available;
3. Utilize the Orange County Fire Authority water flow test form/directions to document a flow test conducted by the local water agency or a professional engineer licensed in the State of California. The result shall be adjusted in accordance with the graduated scaled found in the guideline.

SECTION 8-1.1—Working Plans is hereby amended by adding an additional sentence to item 43 of section 8-1-1-1, as follows:

Section 8-1.1.1 Item 43. Flow test shall be completed within six months of the plan submittal to Orange County Fire Authority.

SECTION 9102.8--NFPA 13D, 1999 Edition, Installation of Sprinkler Systems in One-and Two-Family Dwellings and Manufactured Homes is hereby added as follows:

SECTION 1-5.1--Devices, Materials, Design and Installation is hereby amended by the addition of the following language after the first sentence in this section:

Section 1-5.1 Devices, Materials, Design and Installation At least two spare fire sprinkler heads of each type, temperature rating, and orifice size used in the system shall be kept on the premise in a location approved by the Chief. Tools designed to remove and replace each sprinkler head shall also be located with the spares.

SECTION 3-1--Valves and Drains is hereby amended by deleting exception 1 without substitution.

SECTION 3-2--Pressure Gauges is hereby deleted and substituted with the following:

Section 3-2 Pressure Gauges. At least one water pressure gauge shall be installed on the riser assembly.

Section 3-6—Alarms is hereby amended with the deletion of the exception and addition of the following language after the first paragraph, including two new exceptions, as follows:

Section 3-6 Alarms. Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices

shall be placed on the front or side of the structure and the location subject to final approval by the Chief.

Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 DBA above the average ambient sound level but not less than 70 DBA.

Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exception #1: When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.

Exception #2: When smoke detectors specified under CBC Section 310.9 are used to sound an alarm upon waterflow switch activation.

SECTION 4-2—Position of Sprinklers is hereby amended by adding an additional paragraph to section 4-2.3, as follows:

Section 4-2.3 In rooms or areas with slopes, multiple beams or construction features creating conditions where sprinklers are obstructed, or the sprinkler head placement exceeds parameters specified in the products listing, plans shall bear the wet-stamp of a registered professional engineer certifying equal or greater protection than prescribed in the 1999 Edition of NFPA 13 D.

Section 4-6--Location of Sprinklers is hereby amended by deleting exception 3 and replacing it with a new exception 3, deleting exception 5 without replacement, and adding an additional paragraph after the last exception, as follows:

Section 4-6 Location of Sprinklers. Exception 3: Sprinklers may be omitted from open attached porches, carports and similar open structures. Attached garages shall be protected with listed quick response fire sprinklers spaced to protect a maximum area of 130 square feet (12.1 m²). The diameter of the main or cross-main piping serving the lines in the garage shall be equal to the largest diameter piping on any main or cross main within the system.

Adding the following paragraph after the last exception: All attics shall be protected with intermediate temperature quick response heads which shall be located to protect attic penetrations created by access scuttles or mechanical equipment.

SECTION 9102.9--NFPA 13R, 1999 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby added as follows:

SECTION 2-4.6--Alarms is hereby amended as follows:

Section 2-4.6 Alarms. Local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring

system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 1006.2.9.1.1 of the 2000 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 70 DBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for overcurrent protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

SECTION 2-5.1.7—Position of Residential Sprinklers is amended by addition of language at the end of the section 2-5.1.7.3, as follows:

Section 2-5.1.7.3 Sprinklers shall be positioned so that the response time and discharge are not unduly affected by obstructions such as ceiling slope, beams, or light fixtures. In rooms or areas with multiple beams or construction features creating conditions where sprinklers are obstructed, or the sprinkler head placement exceeds the maximum allowable deflector distance specified in the products listing, plans shall bear the wet-stamp of a registered professional engineer certifying equal or greater protection that prescribed in the 1999 Edition of NFPA 13 R.

SECTION 2-6--Location of Sprinklers Exception 4 is hereby amended as follows:

Section 2-6 Location of Sprinklers. Exception 4: Sprinklers may be omitted from penthouse equipment rooms, crawl spaces, floor ceiling spaces, elevator shafts, and other concealed spaces that are not intended for living purposes or storage. Sprinklers may also be omitted from attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per the OCFA amended NFPA 13D section on head locations in attics of single family homes. All other attics shall be protected per 1999 edition of NFPA 13.

SECTION 9102.10--NFPA 14, 2000 Edition, Installation of Standpipe, Private Hydrant and Hose Systems is hereby added as follows:

SECTION 2-8.2 is hereby deleted and replaced with the following:

Section 2-8.2 The fire department connection shall have a minimum of two 2 ½", internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

SECTION 5-3.1--Location of Hose Connections, General is hereby deleted and replaced with the following:

Section 5-3.1 Location of Hose Connections, General Class I Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor.

Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

Class III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor.

SECTION 9102.11--NFPA 20, 1999 Edition, Installation of Stationary Pumps for Fire Protection is hereby added as follows:

SECTION 2-14 Water Flow Test Devices is amended by deleting the first sentence of section 2-14.1.2 and adding additional language, as follows:

Section 2-14.1.2 All new fire pump installations shall be designed to test the pump and suction supply and determine that the system is operating in accordance with the design. The flow shall continue until flow has stabilized. (See 11-2.6.3). The fire pump(s) shall be designed to allow for testing of the fire pump(s) by both a listed and approved exterior discharge test-header device(s) and a listed and approved metering device that re-circulates the test water to the suction line or returns the test water to the water source in accordance with Appendix A-2-14.1.2 and A-2-14.2.1.

SECTION 9102.12--NFPA 24, 1995 Edition, Installation of Private Fire Service Mains and Their Appurtenances is hereby added as follows:

SECTION 1-5--Installation Work is hereby deleted and replaced with the following:

Section 1-5 Installation Work. Installation work shall be done by fully experienced and responsible contractors licensed in the state to do this work. Work shall not begin until plans are approved and appropriate permits secured.

SECTION 2-2—Public Water Systems is hereby amended by deleting section 2-2.6 and substituting with following new language.

Section 2-2.6 Connections larger than 2 inches to public water systems shall be controlled by a post indicator valve of an approved type and located not less than 40 feet from the building protected. Where the water authority has regulations regarding the connection of private fire service mains, they shall apply. Where the water authority requires back-flow protection the following methods or assemblies are acceptable:

1. An above ground assembly approved by the water authority, painted OSHA safety red, and with the valves locked in the open position. Valves controlling more than 100 sprinkler heads shall be monitored to an approved location.
2. A below ground assembly approved by the water authority and located in an approved vault. The last valve on the assembly shall be controlled by an approved post indicator

device (see Figure A-2.6 b). The post indicator device shall be painted OSHA safety red, be locked in the open position and if controlling more than 100 sprinkler heads monitored to an approved location.

Exception: Where it is impractical to locate post indicating valve(s) 40 feet from the building served, they shall be permitted to be located closer, or wall post indicating valves used, providing they are set in locations by blank walls or without openings of not less than 15 feet on either side of the valve, clear to the roof, or permitted to be placed in valve rooms accessible only from the exterior, or exterior risers providing they are set in locations by blank walls or without openings of not less than 15 feet on either side of the valve, clear to the roof. The location is subject to approval by the authority having jurisdiction.

SECTION 2-6—Fire Department Connection is hereby amended by adding additional language to the end of the first sentence of section 2-6.2 and deleting and replacing section 2-6.6, and modifying the first sentence of section 2.6.9, as follows:

Section 2-6.2 Fire department connections shall be equipped with listed plugs or caps, properly secured and arranged for removal by fire departments and shall be protected from mechanical injury.

Section 2-6.6 The fire department connection shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

Exception 1: When the system design demand is 500 gpm, including the interior hose stream demand, or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

Exception 2: The fire department connection may be located within 150 feet of a private hydrant providing the fire department connection pipe is connected to the fire sprinkler system by a stand-alone pipe that connects down-stream of the sprinkler system check valve.

Section 2.6.9 Fire department connections shall be on the street side of building and arranged so they are located immediately adjacent to the approved fire department access road so that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence, posts, or other fire department connections.

Section 8-5--Pipe Joint Assembly is hereby amended by modifying the first sentence in Section 8-5.2 and adding Section 8-5.3

Section 8-5.2 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material after assembly and prior to poly-tube installation

Section 8-5.3 All bolts used in pipe-joint assembly shall be stainless steel.

SECTION 3-3—Post Indicator Valves is hereby amended by deleting the exception in section 3-3.2 and replacing with the following:

Section 3-3.2 Where it is impractical to locate post indicating valve(s) 40 feet from the building served, they shall be permitted to be located closer, or wall post indicating valves used providing they are set in locations by blank walls, or without openings of not less than 15 feet on either side of the valve, clear to the roof, or permitted to be placed in valve rooms accessible only from the exterior, or exterior risers providing they are set in locations by blanks walls or without openings of not less than 15 feet on either side of the valve, clear to the roof. The location is subject to approval by the authority having jurisdiction.

SECTION 3-5—Sectional Valves is amended by modifying the first sentence of section 3-5.1 and adding a second sentence as follows:

Section 3-5.1 Large private fire service main systems shall have post indicating sectional controlling valves after five appurtenances in order to permit sectionalizing the system in the event of a break or for making of repairs or extensions. A hydrant or a single fire line service to a building counts as one appurtenances.

SECTION 7-2--Coating and Lining of Buried Pipe is hereby deleted and replaced with the following:

Section 7-2 Coating and Lining of Buried Pipe. All ferrous metal pipe shall be lined, and steel pipe shall be coated and wrapped, with joints coated and wrapped after assembly. All ferrous pipe and fittings shall be protected with a loose 8-mill polyethylene tube. The ends of the tube shall be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

SECTION 8-6.2—Methods of Restraining Fire Mains is hereby amended by adding a sentence at the end of section 8-6-2-1, as follows:

Section 8-6.2.1 The trench shall be excavated for thrust blocks and inspected prior to pour. Care shall be taken when forming and pouring thrust blocks that fittings and joints are not buried in concrete.

SECTION 8-7—Backfilling is hereby amended by revising section 8-7.1 as follows:

Section 8-7. 1 Backfill shall be well tamped in layers and wetted under and around pipes to prevent settlement or lateral movement. Backfill shall consist of clean fill sand to a minimum 12” below and to a minimum of 12” above the pipe.

APPENDIX I-B

LIFE-SAFETY REQUIREMENTS FOR EXISTING HIGH-RISE BUILDINGS, is hereby amended by deleting Section 1—Scope and replacing with new language and Section 6.1, item 2--Special Provisions and Alternatives, Automatic Sprinklers and substituting with the following:

Section 1—SCOPE. These provisions apply to all existing high-rise buildings constructed prior to the adoption of this appendix, each having floors used for human occupancy located 75 feet (22 860 mm) or more above the lowest level of fire department vehicle access.

Section 6.1, item 2 Automatic Sprinklers. An approved automatic fire-extinguishing system shall be installed throughout the building in accordance with the requirements of NFPA 13 as adopted in Appendix V of this code. In addition to the main water supply, a secondary on-site supply of water equal to the hydraulically calculated sprinkler design demand plus 100 gallons (378.5 L) per minute additional for the total standpipe system shall be provided. This supply shall be automatically available if the principal supply fails and shall have a duration of 30 minutes.

Sprinkler control valves and waterflow detecting devices shall be provided at the lateral connection to the riser on each floor.

APPENDIX II-A

SPECIAL HAZARDS is hereby amended by changing the title to **APPENDIX II-A-1 SPECIAL HAZARDS**:

APPENDIX II-A-1

SUPPRESSION AND CONTROL OF HAZARDOUS FIRE AREAS is hereby amended by deleting section 18—Unusual Circumstance and replacing with new language and adding new sections: section 25—Use of Equipment, section 26—Notice of Spark Arrester Requirement, and section 27-- Fuel Modification Requirements for New Construction ,as follows:

SECTION 18—Clearance of Brush or Vegetation Growth from Roadways is hereby deleted and replaced as follows:

SECTION 18—Unusual Circumstances is hereby deleted and replaced as follows:

Section 18—Unusual Circumstances

The chief may suspend enforcement and require reasonable alternative measures designed to advance the purposes of this article if he determines in any specific case that any of the following conditions exist:

1. Difficult terrain.
2. Danger of erosion.
3. Presence of plants included in any state and federal resources agencies, California Native Plant Society and county-approved list of wildlife, plants, rare, endangered and/or threatened species.
4. Stands or groves of trees or heritage trees.
5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions of Sections 15, 16 or 17 of this appendix undesirable or impractical.

SECTION 25—Use of Equipment is added as follows:

Section 25—Use of Equipment

1. Except as otherwise provided in this section, no person shall use, operate, or cause to be operated, in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 25.3 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire pursuant to Section 25.3.
2. Spark arresters affixed to the exhaust system of engines or vehicles subject to this section shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.
3. A spark arrester is a device constructed of nonflammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal

combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.

4. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
5. Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in effective mechanical condition.

SECTION 26—Notice of Spark Arrester Requirement is added as follows:

SECTION 26 Notice of Spark Arrester Requirement:

No person shall sell, offer for sale, lease, or rent to any person any internal combustion engine subject to the provisions of Section 25 and not subject to the provisions of Section 13005 of the Health and Safety Code, unless he provides a written notice to the purchaser or bailee, at the time of sale or at the time of entering into the lease or rental contract, stating that it is a violation of the UFC to use or operate the engine in, upon or adjoining any hazardous fire area, unless the engine is equipped with a spark arrester as defined in Section 25, maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire pursuant to Section 27.

SECTION 27—Fuel Modification Requirements for New Construction is added as follows:

SECTION 27— Fuel Modification Requirements for New Construction: All new buildings to be built or installed in areas containing combustible vegetation shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the chief concurrent with the submittal for approval of any tentative map.
2. Final fuel modification plans shall be submitted to and approved by the chief prior to the issuance of a grading permit.
3. The fuel modification plans shall meet the criteria set forth in the Orange County Fire Authority Fuel Modification Plan Guidelines.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification shall be approved by the chief.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in Section 16.

APPENDIX II-A-2

APPENDIX II-A-2 SPECIAL FIRE PROTECTION AREAS (SFPA) /VERY HIGH FIRE HAZARD SEVERITY ZONES (VHFHSZ).

Section 1-Scope The existence of structures in, or adjacent to, grass, brush-, or forest-covered lands poses a risk to life and property from fires. This includes the risk of an uncontrolled fire spreading into structures, fire exposures from adjacent structures, and structure fires spreading to wildland fuels. In order to mitigate the risks in these Special Fire Protection Area/Very High Fire Hazard Severity Zones, provide safeguards to prevent fire from occurring, and to provide adequate fire protection facilities to control the spread of fires, all buildings structures, and lands located within Special Fire Protection Area/Very High Fire Hazard Severity Zones shall be in accordance with Appendix II-A-1.

VHFHSZ	SFPA
Dana Point	County Unincorporated
Irvine	Yorba Linda
Mission Viejo	Lake Forest
San Clemente	Aliso Viejo
San Juan Capistrano	Rancho Santa Margarita

Section 2-Definitions

ENCLOSED STRUCTURE. A structure with a roof and two or more sides.

EXPOSED SIDE. For the purpose of applying requirements to structures in Special Fire Protection Area/Very High Fire Hazard Severity Zones, the exposed side of a structure shall be defined as the exterior wall of a structure for which a 100 foot (480 mm) perpendicular line drawn from any portion of that wall intersects the fuel modification zone or any forest-covered, brush-covered, grass-covered area or other land covered with combustible vegetation.

The following statement is added to the “Exposed Side” definition for the following Cities:

DANA POINT, MISSION VIEJO, SAN JUAN CAPISTRANO, YORBA LINDA, LAKE FOREST, ALLISO VIEJO, AND RANCH SANTA MARGARITA

The two exterior walls adjoining the wall intersecting the fuel modification shall also be considered “exposed sides” for the purpose of applying requirements.

RECONSTRUCTION/ROOM ADDITION. In Special Fire Protection Area/Very High Fire Hazard Severity Zones, any existing building undergoing construction/room addition within any 2-year period, in which the area of reconstruction is 75 percent or more prior to the submittal of a building permit application, shall comply with all the code provisions for new construction and this Appendix.

SPECIAL FIRE PROTECTION AREA/VERY HIGH FIRE HAZARD SEVERITY ZONE

is any geographic area designated by the Chief which contains the type and condition of vegetation, topography, weather and structure density which potentially increases the possibility of wildland conflagration fires.

UNENCLOSED STRUCTURE. Includes structures with a roof and no more than one side and structures having no roof or other covering. Unenclosed structures include patio covers, decks and balconies.

Section 3-Authority

The Chief shall have the responsibility to designate all Special Fire Protection Area/Very High Fire Hazard Severity Zones.

Section 4-Fuel Modification Plans .

1. General. Fuel Modification plans shall be prepared in accordance with this section.
2. Fuel Modification Plan. Preliminary fuel modification plans for all improvements in areas containing combustible vegetation shall be submitted to the chief concurrent with the submittal for approval of any tentative map. Final fuel modification plans shall be submitted to and approved by the Fire Chief prior to the issuance of a grading permit. The plans shall meet the criteria set forth in the Orange County Fire Authority Fuel Modification Guidelines For High Fire Hazard Areas.

Exception: The Fire Chief, with the concurrence of the Building Official, may waive the vicinity plan submittal requirements of this section.

3. Issuance of Grading or Building Permits. No grading permit or, if no grading permit is to be issued, no building permit for new construction, shall be issued prior to the submittal to and approval by the Fire Authority of vicinity and fuel modification plans as required by this Section.

Section 5-Street Widths

The minimum width of private and public streets shall not be less than 28 feet (8534 mm). Private streets and driveways serving no more than 3 dwellings and not exceeding 150 feet (45 720 mm) in length shall not be less than 24 feet (7315 mm) in width.

Section 6-Building Construction Features

1. General. In addition to other relevant provision of the adopted Building Code, all structures located within Special Fire Protection Area/Very High Fire Hazard Severity Zones shall also be in accordance with Section 6.
2. Exterior Walls. The exposed side of exterior walls, including enclosed accessory structures, shall be of non-combustible materials or 1-hour fire resistive construction for the exterior portion. No openings shall be permitted in such walls.

EXCEPTION: 1 3/8 inch (34 mm) solid core doors, metal doors, and multi-glazed windows and doors are permitted.

3. Attic and Foundation Ventilation Openings. Attic or foundation ventilation openings in vertical walls and attic roof vents shall not exceed 144 square inches (.09 m²) per opening and shall be covered with metal louvers and ¼ inch (6.25 mm) mesh corrosion-resistant metal screen. Ventilation openings and access doors shall not be permitted on the exposed side of the structure.
4. Unenclosed Accessory Structures. Unenclosed accessory structures on the exposed side, with openings between the living area and the accessory structure, shall be of noncombustible, one-hour fire-resistive or heavy timber construction.

EXCEPTION 1: Where openings in the wall between the living area and the accessory structure are protected by a fire assembly having a 20-minute fire-protection rating.

EXCEPTION 2: The walking surface of balconies and decks may be constructed on non-rated materials.

EXCEPTION 3: In lieu of fire protection as outlined in this section, accessory structures may be protected by an approved residential automatic fire sprinkler system.
5. Property Lines. Structure on adjacent properties shall be 5 feet (1524 mm) from property lines or shall be separated by a minimum of 10 feet (3048 mm).

EXCEPTION: Exterior walls with no openings are exempt from requirements of this Section provided exterior portion of exterior walls shall be of non-combustible or 1-hour fire resistive construction.
6. Cornices, Eave Overhangs, Soffits and Exterior Balconies. Cornices, eave overhangs, soffits, exterior balconies and similar architectural appendages and projections on the exposed side of the structure shall be of noncombustible construction or enclosed in one-hour fire resistive material or heavy timber construction conforming to Section 605.6 of the UBC. Space between rafters at the roof overhangs shall be protected by non-combustible materials or with double 2 inch (51 mm) nominal solid blocking under the exterior wall covering. No ventilation openings or other openings shall be permitted in eave overhangs, soffits, between rafters at eaves or in other overhanging areas on the exposed side of the structure.
7. Roof Coverings. Roof coverings on structures in Special Fire Protection Area/Very High Fire Hazard Severity Zones shall be as follows:

New and Reconstruction. Roof Covering for new construction and reconstruction shall, as a minimum, be a Class A roof assembly.

Repairs and Additions. Repairs and additions of 10 percent or more of an existing roof area shall be with a Class A roof covering.
8. Skylights. Skylights shall have a noncombustible frame glazed with dual glazing of heat strengthened or fully tempered glass or shall be a ¾ hour fire resistive assembly.
9. Automatic fire Extinguishing Systems. All new construction and reconstructed structures located in Special Fire Protection Area/Very High Fire Hazard Severity Zones shall be equipped with an approved automatic fire sprinkler system.

EXCEPTION: Accessory structures such as patio covers, storage sheds, bridges, decks, carports, greenhouses or similar structures are exempt from requirements of this section.

Section 7-Exclusions from Special Fire Protection Area/Very High Fire Hazard Severity Zones

A property which is designated as being within a Special Fire Protection Area/Very High Fire Hazard Severity Zone may later be excluded from within the Special Fire Protection Area/Very High Fire Hazard Severity Zone, upon a finding that inclusion of the property within a Special Fire Protection Area/Very High Fire Hazard Severity Zone and the application of the requirements of this Appendix to the property are no longer necessary for effective fire protection within the area to be excluded.

The procedures for excluding a property from within a Special Fire Protection Area/Very High Fire Hazard Severity Zone and the requirements of this Appendix are set forth in Sections 8 and 9 below.

Upon determination that the property shall be excluded from the Special Fire Protection Area/Very High Fire Hazard Severity Zone, the property shall be relieved of further compliance with this Appendix.

Note: Where the City Council in Yorba Linda- only- replaces the Fire Chief in the following sections, it is noted as “(City Council)”.

Section 8-Conditional Exclusions

The Fire Chief (City Council) finds that, under the following circumstances, an area previously designated, as being within a Special Fire Protection Area/Very High Fire Hazard Severity Zone shall:

1. No longer be included within a Special Fire Protection Area/Very High Fire Hazard Severity Zone because the requirements of this Appendix are no longer necessary for effective fire protection within the area to be excluded;
2. Be excluded from the requirements of this Appendix because, as a result of its location and/or through required compliance with the provisions of any applicable Fuel Modification Zone Guidelines in effect for the area as required by Section 11, the area will no longer be in, upon, or adjoining a Special Fire Protection Area/Very High Fire Hazard Severity Zone; and
3. Be removed from the Special Fire Protection Area/Very High Fire Hazard Severity Zone Map.

The conditions for such an exclusion (the “Exclusion Conditions”) shall be as follows:

- 3.1. A final subdivision or parcel map (a “Map”) for the Property to be excluded has been recorded in the official records of the County Recorder and that Map:
 - a. Clearly identifies the Property to be excluded; and
 - b. Was approved subject to conditions of approval which include those conditions described in Section 11;

3.2. Compliance with Section 11 Item 1 has been certified by the Fire Chief as evidenced by its execution of a document in substantially the form of Section 11; and

3.3. Application for revision of the Special Fire Protection Area/Very High Fire Hazard Severity Zone map has been made to the Fire Chief (City Council), accompanied by all required fees.

Section 9-Petitions for Exclusions

A property within a Special Fire Protection Area/Very High Fire Hazard Severity Zone may be excluded from the Special Fire Protection Area/Very High Fire Hazard Severity Zone under circumstances other than those set forth in Section 11 provided that:

1. The legal or equitable owner of the property petitions the Fire Chief (City Council) to have that property excluded from the Special Fire Protection Area/Very High Fire Hazard Severity Zone and the requirements of this Appendix.
2. The Fire Chief (City Council) makes a finding, supported by substantial evidence in the record, that the requirements of this Appendix are not necessary for effective fire protection within the area to be excluded.
3. The Fire Chief (City Council) makes a finding, supported by substantial evidence in the record, that, as a result of its location and/or through required compliance with the provisions of any applicable Fuel Modification Zone Guidelines in effect for the area as required by Section 11, the area will no longer be in, upon, or adjoining a Special Fire Protection Area/Very High Fire Hazard Severity Zone.
4. The Fire Chief (City Council) may impose such conditions on the removal of properties from the Special Fire Protection Area/Very High Fire Hazard Severity Zones as may be required in order for the Fire Chief to make these findings.

Section 10-Additions to Special Fire Protection Area/Very High Fire Hazard Severity Zones

The Fire Chief (City Council) may add areas to a Special Fire Protection Area/Very High Fire Hazard Severity Zone, including areas previously removed pursuant to Sections 8 and 9 above, if the Fire Chief (City Council) finds, upon substantial evidence in the record, that the requirements of this Appendix are required for effective fire protection within the area to be designated a Special Fire Protection Area/Very High Fire Hazard Severity Zone. The demonstrated failure of a property owner to substantially comply with any of the conditions in Section 11 may constitute substantial evidence that imposition of the requirements of this Appendix are required for effective fire protection within the property to be re-designated as a Special Fire Protection Area/Very High Fire Hazard Severity Zone, provided that the property meets all other state and local requirements for inclusion within a Special Fire Protection Area/Very High Fire Hazard Severity Zone.

Section 11-Required Conditions of Approval

1. There shall be created and maintained on and/or adjoining the Property a fuel modification zone (the "Fuel Modification Zone") which meets all standard fuel modification requirements of the Fire Chief (City Council).
2. Compliance with any maintenance provisions of the applicable fuel modification requirements shall be enforced pursuant to the provisions of any applicable Fuel Modification Zone Maintenance Guidelines, if adopted by the Fire Chief (City Council), or through any other legal remedy available to the Fire Chief (City Council) including fees, liens, prosecution and so forth.
3. Where the Fuel Modification Zone is to be maintained by a homeowners' association:
 - a. The conditions, covenants and restrictions recorded against all property within the homeowners' association shall require specifically budgeted funds sufficient to meet the ongoing maintenance obligations of the applicable fuel modification requirements.
 - b. The Fuel Modification Zone shall be subject to an annual inspection conducted by a representative of the Fire Chief in order to assure that the Fuel Modification Zone continues to be maintained in compliance with the applicable fuel modification requirements. A reasonable fee, to be established by the Fire Chief from time to time, may be charged to each homeowners' association subject to the fuel modification requirements to offset the costs of the annual inspection.
4. Any occupied structure on any lot which adjoins a Special Fire Protection Area/Very High Fire Hazard Severity Zone shall be constructed in compliance with all requirements of the Uniform Building Code and Uniform Fire Code which are applicable to dwellings or occupied structures which are built on lots within Special Fire Protection Area/Very High Fire Hazard Severity Zones with the exception that sprinklers shall not be required unless otherwise provided for by other applicable provisions of the Uniform Building Code or the Uniform Fire Code. For purposes of this Section 11, adjoining means the first row of buildings bordering a Special Fire Protection Area/Very High Fire Hazard Severity Zone.
5. Before Certificate or Occupancy (or its equivalent) is issued by the Fire Chief for any Adjoining Structure, all requirements of Section 11 must first be satisfied to the satisfaction of the Fire Authority.
6. All construction within a tract which is to be removed from a Special Fire Protection Area/Very High Fire Hazard Severity Zone shall have Class A roof assemblies.

Section 12-Amendments to Special Fire Protection Area/Very High Fire Hazard Severity Zone Map

The Fire Chief shall cause an official map of the Special Fire Protection Area/Very High Fire Hazard Severity Zones to be prepared. The map shall be reviewed and updated on a three-year basis or more frequently as deemed necessary. When a property is excluded from a Special Fire Protection Area/Very High Fire Hazard Severity Zone or added to a Special Fire Protection Area/Very High Fire Hazard Severity Zone, the Fire Chief shall cause the Special Fire

Protection Area/Very High Fire Hazard Severity Zone map to be amended to reflect such exclusion or addition.

APPENDIX II-D

RIFLE RANGES is hereby amended by adding a second paragraph to SECTION 1—
Permits, as follows:

Section 1—Permit. The requirement for a permit shall apply to indoor or outdoor firing, shooting or target ranges established, maintained or operated for the discharging of a rifle, pistol, revolver, shotgun or firearm.

APPENDIX II-E

HAZARDOUS MATERIALS MANAGEMENT PLANS AND HAZARDOUS MATERIALS INVENTORY STATEMENTS is hereby deleted and replaced with the following:

CHEMICAL CLASSIFICATION PACKET. Hazardous materials inventories shall be submitted for approval in accordance with the Orange County Fire Authority Chemical Classification Packet.

APPENDIX III-A

FIRE-FLOW REQUIREMENTS FOR BUILDINGS is hereby amended by deleting the exception in 5.2--Buildings Other than One- and Two-Family Dwellings and substituting the following:

Exception: A reduction in required fire flow of up to 50 percent, as approved by the chief, may be allowed when the building is provided with an approved automatic sprinkler system. The resulting fire flow shall not be less than 1,500 gallons per minute (5677.5 L/min.).

APPENDIX III-B

FIRE HYDRANT LOCATIONS AND DISTRIBUTION is hereby amended, as follows:

TABLE NO. A-III-B-1 REQUIRED NUMBER OF FIRE HYDRANTS

FIRE FLOW REQUIREMENTS (GPM)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS (FEET)^{1,2,3,7}	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR FIRE DEPARTMENT ACCESS ROADWAY TO A HYDRANT^{4,7}
1750 or less	1	500	250
1751 - 2250	2	450	225
2251 – 2500	3	450	225
2501 - 3000	3	400	225
3001 – 4000	4	350	210
4001 – 5000	5	300	180
5001 – 5500	6	300	180
5501 – 6000	6	250	150
6001 – 7000	7	250	150
7001 or more	8 or more ⁵	200	120

1. Spacing shall be reduced by 100 feet (30 480 mm) for dead-end streets or roads.
2. Where streets are provided with median dividers which cannot be crossed by firefighters pulling hose lines, or arterial streets are provided with four or more traffic lanes and having a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet (152 200 mm) on each side of the street and be arranged on an alternate basis up to a fire-flow requirement of 7,000 gallons per minute (26 495 L/min) and 400 feet (122 000 mm) for higher fire flow requirements.
3. Where new water mains are extended along streets where hydrants are not needed for the protection of structures or similar fire problems, fire hydrants shall be provided at a spacing not to exceed 1,000 feet (305 000 mm) to provide for transportation hazards.
4. Reduce by 50 feet (15 240 mm) for dead-end streets or roads.
5. One hydrant for each 1,000 gallons per minute (3785 L/min) or fraction thereof.
6. Fire hydrants shall be a minimum of 40 feet (12 192 mm) from any building with the exception of detached one- and two-family dwellings.
7. In residential (R-3 Occupancy) subdivisions, maximum hydrant spacing is 300 feet. This spacing may be increased to 600 feet (182 880 mm) if all homes and attached garages are protected with automatic fire sprinklers systems and fireflow requirements do not exceed 2000 gpm.

APPENDIX III-C

TESTING AUTOMATIC SPRINKLER AND STANDPIPE SYSTEMS is hereby amended by adding a new Section 4 to UFC Appendix Standard A-III-C-1 as follows:

SECTION 4—PRIVATE HYDRANT SYSTEMS

Section 4.1 Inspection and Testing. Private hydrant systems shall be inspected and serviced annually, and the owner shall correct any deficiencies immediately. Hydrants shall be flushed and the system shall be flow tested to insure that the required water supply is available. All valves shall be tested and operated. All gaskets and caps shall be inspected and the hydrant paint shall be maintained in good condition. Hydrant blue-reflective street markers and protective barriers shall be installed and maintained in good-order.

APPENDIX VI-A

HAZARDOUS MATERIALS CLASSIFICATION is hereby amended by adding the following beginning paragraph to SECTION 1—SCOPE:

Section 1—Scope. If confusion or conflict occurs with chemical classification, final determination shall be in accordance with the Orange County Fire Authority's chemical classification database.

(THE END OF AMENDMENTS)